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REMARKS

This communication is in response to the Office Action mailed on October 24, 2005. In the Office Action, claims 1-33 were pending. Claims 22-27 were withdrawn from consideration and have been cancelled in a prior response.

The Office Action first reports that claims 1-8, 13, 19 and 28-31 were rejected under 35 U.S.C. §102(a) as being unpatentable over Tam et al. (U.S. Patent No. 5,421,943) in view of Schott (U.S. Patent No. 6,349,017). Additionally, claims 9-11 and 32 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tam et al. in view of Schott and further in view of Berg et al. (U.S. Patent No. 6,704,256). Furthermore, claims 20 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tam et al. in view of Schott and further in view of Amemiya et al. (U.S. Patent No. 6,002,550). Claims 1, 13 and 28 are pending independent claims.

Independent claim 1 recites a suspension assembly having a slider body with a trailing edge face. A bond pad is positioned on the trailing edge face and a conductive trace is connected to the bond pad to form an electrical connection. A heating element includes a low resistivity portion and a high resistivity portion. The high resistivity portion is positioned proximate the electrical connection. Furthermore, an insulating component is positioned between the conductive trace and the heating element proximate the electrical connection.

Applicant submits that independent claim 1 is non-obvious in view of the cited references because there is no motivation or suggestion to combine them. The Federal Circuit has held that rejecting patents solely by finding prior art corollaries for the claimed elements would permit an Examiner to use a claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of

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the claimed invention, which would be "an illogical and inappropriate process by which to determine patentability." In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998) (citing Sensonic, Inc. v. Aerosonic Corp., 81 F.3d 1566, 1570, 38 USPQ.2d 1551, 1554 (Fed. Cir. 1996)). Even seemingly simple changes require a finding of a suggestion in the prior art to make the modification to avoid the improper use of hindsight.

Applicant simply believes that the standard used for combining references is incorrect and does not follow the current standard as set forth clearly by the Federal Circuit in In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002). The Court of Lee held that a factual inquiry on whether to combine references must be based on objective evidence of record, which has been reinforced in a number of decisions. In re Lee at 1433, citing McGinley v. Franklin Sports, Inc., 60 USPQ 2d 1001, 1008 (Fed Cir. 2001) and Brown & Williamson Tobacco Corp. v. Phillip Morris Inc., 56 USPQ 2d 1456, 1459 (Fed. Cir. 2000).

Other notable quotes of In re Lee include "a showing of a suggestion, teaching or motivation to combine the prior art references is an 'essential component of an obviousness holding'", quoting C.R. Bar Inc. v. M3 Systems, Inc., 48 USPQ 2d 1225, 1232 (Fed. Cir. 1998), "there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant", In re Fine, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988) and "'teachings of references can be combined only if there is some suggestion or incentive to do so.'" [emphasis in the original], quoting ACS Hosp. Sys., Inc. v. Montefiore Hosp., 221 USPQ 929, 933 (Fed. Cir. 1984). Id. Thus, a showing of a suggestion, teaching or motivation to combine the prior art references is an essential component of an obviousness holding.

In view of the foregoing, Applicant's submit that there is no evidence for which to combine the references Tam et al. and

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Schott in order to lead to the recited features in independent claim 1. In particular, the bonding provided by Tam et al. and Schott are fundamentally different. Tam et al. make no reference of including bond pads positioned on a trailing edge face of a slider. Instead, Tam et al. utilize a heating element on the trailing edge. The bonding performed in Tam et al. is for a ceramic of silicon chip 13. Thus, including bond pads on bonding surface 12 would lead to not only an interference between heating element 15 and the bond pads of Schott but furthermore these bond pads would not have function as they would be covered by silicon chip 13. Additionally, the proposed Tam et al./Schott combination device would not include an insulation component position between a conductive trace and a heating element, as a conductive trace would need to be electrically coupled to the bond pad on the face of the slider. Thus, the insulation component would not be between the conductive trace and heating element. For these reasons, Applicant's submit that the combination of Tam et al. and Schott simply does not teach or suggest the features of independent claim 1. As a result, independent claim 1 and claims 2-12 depending therefrom are believed to be allowable.

Independent claim 13 has been amended to recite subject matter previously recited in claim 14. Claim 14 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. As a result, claim 13 and dependent claims 14-21 are believed to be allowable. Claim 14 has been amended to recite means for insulating the conductive trace and the heating element. Furthermore, claims 15-18 have been amended to depend from independent claim 13.

Amended independent claim 28 recites a suspension interconnect having a suspension and a conductive element positioned on the suspension. A heating element is also positioned on the suspension and includes a low resistivity

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portion and a high resistivity portion. An insulating component is positioned between the conductive element and the heating element.

Tam et al. describe a resistive heating device for bonding temperature critical components. A heating element 15 is integrated into a substrate 11. A pulse generator provides a drive to the heating element 15, which provides heat in the area of heating element 15. A silicon chip 13 can be bonded to substrate 11 using heat from heating element 15. Tam et al. do not discuss coupling a conductive element or a heating element to a suspension.

Schott describes a suspension assembly using bonding pads of a slider. An ultrasonic bonding tool 60 heats bonding components 22. The bonding tool 60 is external to the suspension and does not utilize an insulating component.

Berg et al. describe a flexible connection for a miniature optical head. A flex circuit includes contact pads for passing and receiving electrical signals via bond wires. Berg et al. do not discuss a heating element coupled to a suspension.

Amemiya et al. describe a head assembly with ball member for electrically connecting a slider member and a suspension member. An ultrasonic bonding tool provides heat to a bonding component. Amemiya et al. do not discuss a heating element positioned on a suspension.

In contrast to the features recited in independent claim 28, the prior art fails to teach or suggest a suspension interconnect having a suspension with a conductive element and a heating element with an insulating component positioned there between. The heating element of Tam et al. is integrated onto a substrate while Schott has an external heating tool. The references also simply do not teach or suggest an insulating component on the suspension to insulate the conductive element

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and the heating element. Thus, claim 28, as amended, is believed to be allowable.

Claims 29-33 have been amended to recite an "interconnect" instead of assembly. Furthermore, claim 29 has been amended to recite "low" instead of lower. These amendments were not done for prior art reasons. Additionally, these claims are believed to be separately patentable when combined with independent claim 28 and thus are believed to be allowable.

In view of the foregoing, Applicants submit that the present application is in condition for allowance. Reconsideration and allowance of the application is requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 

Todd R. Fronek, Reg. No. 48,516
Suite 1400 - International Centre
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312

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